

YONEZAWA *et al.* — U.S. Patent Appln. 09/873,408
Attorney Matter No.: 008312-0281351

- Amendment -

REMARKS

Reconsideration and the timely allowance of the pending claims, in view of the following remarks, are respectfully requested.

In the Office Action dated September 2, 2005, the Examiner rejected claims 1, 2, and 5, under 35 U.S.C. §102(b), as allegedly being anticipated by Baba '227 (U.S. Patent No. 5,768,227); and rejected claims 13-15, 18, 21, and 25-27, under 35 U.S.C. §103(a), as allegedly being unpatentable over Baba '227 in view of Yamamoto '826 (U.S. Patent No. 6,028,826).

By this Amendment, Applicants have amended claim 1 to provide a clearer presentation of the claimed subject matter and have cancelled claims 13-15, 18, 21, and 24-27, without prejudice or disclaimer. Applicants submit that no new matter has been introduced. As such, claims 1, 2, and 5 are currently presented for examination, of which claim 1 is the sole independent claim.

Applicants traverse the rejections of the remaining claims, under §102(b), §103(a), for the following reasons:

I. Prior Art Rejection of Claims 1, 2, & 5.

As indicated above, independent claim 1 now positively recites the use of a determination means that temporarily restricts functions of the compensation means when the determination means has determined that a disturbance component is mixed in the detection signal. Claim 1 further positively recites that the compensation means holds an additional value immediately before the restriction by the determination means to continuously add the additional value or that the compensation means sets the additional value to zero while the functions of the compensation means are restricted by the determination means. These features are amply supported by the embodiments disclosed in the Specification. (*See, e.g.*, Original Specification, page 25, line 15 – page 26, line 8).

YONEZAWA *et al.* – U.S. Patent Appln. 09/873,408

Attorney Matter No.: 008312-0281351

- Amendment -

Unlike the present invention, however, there is nothing in either the Baba '227 or Yamamoto '826 reference, whether taken alone or in reasonable combination, that teach or suggest the combination of features recited by amended claim 1. In particular, Baba '227 teaches the use of a phase compensator 50 for stabilizing the tracking servo loop, a driver 51, a tracking actuator 52, and a driving addition point 53 for adding a signal from the adjuster 38 to the tracking servo loop constitute the tracking servo loop. With this configuration, as the two servo loops are ON, the adjuster 38 outputs a driving signal for driving the tracking actuator 52 to the driving addition point 53, and the tracking actuator 52 is driven to oscillate the objective lens 7 within a range of one track. (See, e.g., Baba '227: col. 22, lines 21-39, FIG. 23).

However, as acknowledged by the Examiner, there is nothing in the Baba '227 reference that teaches the use of a determination means that temporarily restricts functions of the compensation means, as now required by independent claim 1. (See, e.g., Examiner comments regarding claim 13, Office Action, page 5, lines 1-3). Accordingly, Applicants request the immediate withdrawal of the rejections of claims 1, 2, and 5, under §102(b).

Although the cancellations of claims 13-15, 18, 21, and 24-27, render the §103(a) rejections moot, Applicants note that to the extent that the Yamamoto '826 reference could be applied to claims 1, 2, and 5, Yamamoto '826 clearly fails to cure the deficiencies of Baba '227 presented above. In particular, Yamamoto '826 teaches that, for loop gain adjustments in the focusing control system, controller 150 sends a signal to the external disturbance generator 132 to adjust the loop gain in the focusing control system, thereby applying an external disturbance to the focusing control system. When abnormality detector 131 detects an abnormality, such as a lack of RF signal due to a scratch, vibration, or the like, controller 150 sends a signal to the external disturbance generator 132 to stop the output of the external disturbance for measurement. When abnormality detector 131 no longer detects an abnormality, controller 150 resumes sending a signal to the external disturbance generator 132 to output the external disturbance. (See, e.g., Yamamoto '826: col. 15, lines 35-50; FIG. 1, 9A).

YONEZAWA *et al.* – U.S. Patent Appln. 09/873,408
Attorney Matter No.: 008312-0281351

- Amendment -

In addition, for loop gain adjustments in the tracking control system, Yamamoto '826 teaches that controller 150 sends a signal to the external disturbance generator 134 to adjust the loop gain in the tracking control system, in order to apply an external disturbance to the tracking control system. And, when the abnormality detector 131 detects an abnormality, controller 150 sends a signal to external disturbance generator 134 to stop the output of the external disturbance for measurement. When abnormality detector 131 no longer detects an abnormality, controller 150 resumes sending a signal to external disturbance generator 132 to output the external disturbance. (*See, e.g., Yamamoto '826*: col. 16, lines 1-9; FIG. 1, 9B).

Based on these disclosures, it is clear that Yamamoto '826 fails to teach clearly fails to teach temporarily restricting functions of the compensation means when the determination means has determined that a disturbance component is mixed in the detection signal, as required by claim 1. Rather, for both the focusing control and tracking systems, Yamamoto '826 only teaches that the controller sends a signal to external disturbance generator to stop the output of the external disturbance for measurement based on the detection of lack of a signal – not on the determination of a disturbance component mixed in the detection signal, as required by claim 1.

Furthermore, Yamamoto '826 clearly fails to teach or suggest that the compensation means holds an additional value immediately before the restriction by the determination means to continuously add the additional value or that the compensation means sets the additional value to zero while the functions of the compensation means are restricted by the determination means, as required by claim 1.

For at least these reasons, Applicants submit that neither Baba '227, Yamamoto '826, nor their combination, teach or suggest the combination of features recited by amended independent claim 1. Accordingly, Applicants submit that claims 1, 2, and 5 are clearly patentable over these references.

YONEZAWA *et al.* — U.S. Patent Appln. 09/873,408
Attorney Matter No.: 008312-0281351

- Amendment -

II. Conclusion.

All matters having been addressed and in view of the foregoing, Applicants respectfully request the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of all pending claims.

Applicants' Counsel remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975, Order No. 008312-0281351. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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